

*Abstract of the Disclosure*

Polarization monitoring and control in a lightwave communication system is achieved by using an in-line polarimeter in conjunction with a polarization controller.

- 5 The devices are readily compact, accurate and therefore capable of implementation in a variety of system applications. In one embodiment, a polarimeter and controller can be coupled together by a feedback loop between the polarimeter output and the controller input to provide "active polarization control" (APC).